

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/763,539
Source: IFWO
Date Processed by STIC: 11-30-04

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 11/30/2004

PATENT APPLICATION: US/10/763,539

TIME: 12:09:55

Input Set : A:\002010-854.ST25.txt

Output Set: N:\CRF4\11302004\J763539.raw

4 <110> APPLICANT: Karlik, Stephen J.
 5 Pleiss, Michael A.
 6 Konradi, Andrei W.
 7 Grant, Francine S.
 8 Semko, Christopher M.
 9 Dressen, Darren B.
 10 Messersmith, Elizabeth
 11 Freedman, Stephen
 12 Yednock, Ted
 14 <120> TITLE OF INVENTION: Composition for and Treatment of Demyelinating Diseases
 15 and Paralysis By Administration of Remyelating Agents
 17 <130> FILE REFERENCE: 002010-854
 19 <140> CURRENT APPLICATION NUMBER: US 10/763,539
 20 <141> CURRENT FILING DATE: 2004-01-26
 22 <160> NUMBER OF SEQ ID NOS: 71
 24 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 360
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Homo sapiens
 31 <220> FEATURE:
 32 <221> NAME/KEY: CDS
 33 <222> LOCATION: (1)...(360)
 35 <400> SEQUENCE: 1
 36 gtc aaa ctg cag cag tct ggg gca gag ctt gtg aag cca ggg gcc tca 48
 37 Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala Ser
 38 1 5 10 15
 40 gtc aag ttg ttc tgc aca gct tct ggc ttc aac att aaa gac acc tat 96
 41 Val Lys Leu Phe Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp Thr Tyr
 42 20 25 30
 44 atg cac tgg gtg aag cag agg cct caa cag ggc ctg gag tgg att gga 144
 45 Met His Trp Val Lys Gln Arg Pro Gln Gln Gly Leu Glu Trp Ile Gly
 46 35 40 45
 48 agg att gat cct gcg agt ggc gat act aaa tat gac ccg aag ttc cag 192
 49 Arg Ile Asp Pro Ala Ser Gly Asp Thr Lys Tyr Asp Pro Lys Phe Gln
 50 50 55 60
 52 gtc aag gcc act att aca gcg gac acg tcc tcc aac aca gcc tgg ctg 240
 53 Val Lys Ala Thr Ile Thr Ala Asp Thr Ser Ser Asn Thr Ala Trp Leu
 54 65 70 75 80
 56 cag ctc agc agc ctg aca tct gag gac act gcc gtc tac tac tgt gca 288
 57 Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
 58 85 90 95
 60 gac gga atg tgg gta tca acg gga tat gct ctg gac ttc tgg ggc caa 336

(pg. 6)

RAW SEQUENCE LISTING

DATE: 11/30/2004

PATENT APPLICATION: US/10/763,539

TIME: 12:09:55

Input Set : A:\002010-854.ST25.txt

Output Set: N:\CRF4\11302004\J763539.raw

```

61 Asp Gly Met Trp Val Ser Thr Gly Tyr Ala Leu Asp Phe Trp Gly Gln
62          100          105          110
64 ggg acc acg gtc acc gtc tcc tca
65 Gly Thr Thr Val Thr Val Ser Ser
66          115          120
69 <210> SEQ ID NO: 2
70 <211> LENGTH: 120
71 <212> TYPE: PRT
72 <213> ORGANISM: Homo sapiens
74 <400> SEQUENCE: 2
75 Val Lys Leu Gln Ser Gly Ala Glu Leu Val Lys Pro Gly Ala Ser
76 1          5          10          15
77 Val Lys Leu Phe Cys Thr Ala Ser Gly Phe Asn Ile Lys Asp Thr Tyr
78          20          25          30
79 Met His Trp Val Lys Gln Arg Pro Gln Gln Gly Leu Glu Trp Ile Gly
80          35          40          45
81 Arg Ile Asp Pro Ala Ser Gly Asp Thr Lys Tyr Asp Pro Lys Phe Gln
82          50          55          60
83 Val Lys Ala Thr Ile Thr Ala Asp Thr Ser Ser Asn Thr Ala Trp Leu
84 65          70          75          80
85 Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys Ala
86          85          90          95
87 Asp Gly Met Trp Val Ser Thr Gly Tyr Ala Leu Asp Phe Trp Gly Gln
88          100          105          110
89 Gly Thr Thr Val Thr Val Ser Ser
90          115          120
93 <210> SEQ ID NO: 3
94 <211> LENGTH: 318
95 <212> TYPE: DNA
96 <213> ORGANISM: Homo sapiens
98 <220> FEATURE:
99 <221> NAME/KEY: CDS
100 <222> LOCATION: (1)...(318)
102 <400> SEQUENCE: 3
103 agt att gtg atg acc cag act ccc aaa ttc ctg ctt gtt tca gca gga
104 Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
105 1          5          10          15
107 gac agg gtt acc ata acc tgc aag gcc agt cag agt gtg act aat gat
108 Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Thr Asn Asp
109          20          25          30
111 gta gct tgg tac caa cag aag cca ggg cag tct cct aaa ctg ctg ata
112 Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
113          35          40          45
115 tat tat gca tcc aat cgc tac act gga gtc cct gat cgc ttc act ggc
116 Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
117          50          55          60
119 agt gga tat ggg acg gat ttc act ttc acc atc agc act gtg cag gct
120 Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Thr Val Gln Ala
121 65          70          75          80

```

RAW SEQUENCE LISTING

DATE: 11/30/2004

PATENT APPLICATION: US/10/763,539

TIME: 12:09:55

Input Set : A:\002010-854.ST25.txt

Output Set: N:\CRF4\11302004\J763539.raw

```

123 gaa gac ctg gca gtt tat ttc tgt cag cag gat tat agc tct ccg tac      288
124 Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Ser Ser Pro Tyr
125           85                      90                      95
127 acg ttc gga ggg ggg acc aag ctg gag atc                        318
128 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
129           100                      105
132 <210> SEQ ID NO: 4
133 <211> LENGTH: 106
134 <212> TYPE: PRT
135 <213> ORGANISM: Homo sapiens
137 <400> SEQUENCE: 4
138 Ser Ile Val Met Thr Gln Thr Pro Lys Phe Leu Leu Val Ser Ala Gly
139 1           5                      10                      15
140 Asp Arg Val Thr Ile Thr Cys Lys Ala Ser Gln Ser Val Thr Asn Asp
141           20                      25                      30
142 Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu Leu Ile
143           35                      40                      45
144 Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe Thr Gly
145           50                      55                      60
146 Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Thr Val Gln Ala
147 65           70                      75                      80
148 Glu Asp Leu Ala Val Tyr Phe Cys Gln Gln Asp Tyr Ser Ser Pro Tyr
149           85                      90                      95
150 Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
151           100                      105
154 <210> SEQ ID NO: 5
155 <211> LENGTH: 429
156 <212> TYPE: DNA
157 <213> ORGANISM: Homo sapiens
159 <220> FEATURE:
160 <221> NAME/KEY: CDS
161 <222> LOCATION: (1)...(429)
163 <400> SEQUENCE: 5
164 atg gac tgg acc tgg agg gtc ttc tgc ttg ctg gct gta gca cca ggt      48
165 Met Asp Trp Thr Trp Arg Val Phe Cys Leu Leu Ala Val Ala Pro Gly
166 1           5                      10                      15
168 gcc cac tcc cag gtc caa ctg cag gag tcc ggt gct gaa gtt gtt aaa      96
169 Ala His Ser Gln Val Gln Leu Gln Glu Ser Gly Ala Glu Val Val Lys
170           20                      25                      30
172 ccg ggt tcc tcc gtt aaa ctg tcc tgc aaa gct tcc ggt ttc aac atc      144
173 Pro Gly Ser Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Phe Asn Ile
174           35                      40                      45
176 aaa gac acc tac atg cac tgg gtt aaa cag cgt ccg ggt cag ggt ctg      192
177 Lys Asp Thr Tyr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu
178           50                      55                      60
180 gaa tgg atc ggt cgt atc gac ccg gct tcc ggt gac acc aaa tac gac      240
181 Glu Trp Ile Gly Arg Ile Asp Pro Ala Ser Gly Asp Thr Lys Tyr Asp
182 65           70                      75                      80
184 ccg aaa ttc cag gtt aaa gct acc atc acc gct gac gaa tcc acc tcc      288

```

RAW SEQUENCE LISTING

DATE: 11/30/2004

PATENT APPLICATION: US/10/763,539

TIME: 12:09:55

Input Set : A:\002010-854.ST25.txt

Output Set: N:\CRF4\11302004\J763539.raw

```

185 Pro Lys Phe Gln Val Lys Ala Thr Ile Thr Ala Asp Glu Ser Thr Ser
186             85             90             95
188 acc gct tac ctg gaa ctg tcc tcc ctg cgt tcc gaa gac acc gct gtt 336
189 Thr Ala Tyr Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
190             100             105             110
192 tac tac tgc gct gac ggt atg tgg gtt tcc acc ggt tac gct ctg gac 384
193 Tyr Tyr Cys Ala Asp Gly Met Trp Val Ser Thr Gly Tyr Ala Leu Asp
194             115             120             125
196 ttc tgg ggt cag ggt acc acg gtc acc gtc tcc tca ggt gag tcc 429
197 Phe Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Glu Ser
198     130             135             140
202 <210> SEQ ID NO: 6
203 <211> LENGTH: 143
204 <212> TYPE: PRT
205 <213> ORGANISM: Homo sapiens
207 <400> SEQUENCE: 6
208 Met Asp Trp Thr Trp Arg Val Phe Cys Leu Leu Ala Val Ala Pro Gly
209 1             5             10             15
210 Ala His Ser Gln Val Gln Leu Gln Glu Ser Gly Ala Glu Val Val Lys
211             20             25             30
212 Pro Gly Ser Ser Val Lys Leu Ser Cys Lys Ala Ser Gly Phe Asn Ile
213     35             40             45
214 Lys Asp Thr Tyr Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu
215     50             55             60
216 Glu Trp Trp Ile Gly Arg Ile Asp Pro Ala Ser Gly Asp Thr Lys Tyr Asp
217 65             70             75             80
218 Pro Lys Phe Gln Val Lys Ala Thr Ile Thr Ala Asp Glu Ser Thr Ser
219             85             90             95
220 Thr Ala Tyr Leu Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
221             100             105             110
222 Tyr Tyr Cys Ala Asp Gly Met Trp Val Ser Thr Gly Tyr Ala Leu Asp
223             115             120             125
224 Phe Trp Gly Gln Gly Thr Thr Val Thr Val Ser Ser Gly Glu Ser
225     130             135             140
228 <210> SEQ ID NO: 7
229 <211> LENGTH: 383
230 <212> TYPE: DNA
231 <213> ORGANISM: Homo sapiens
233 <220> FEATURE:
234 <221> NAME/KEY: CDS
235 <222> LOCATION: (1)...(375)
237 <400> SEQUENCE: 7
238 atg ggt tgg tcc tgc atc atc ctg ttc ctg gtt gct acc gct acc ggt 48
239 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
240 1             5             10             15
242 gtt cac tcc atc gtt atg acc cag tcc ccg gac tcc ctg gct gtt tcc 96
243 Val His Ser Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser
244             20             25             30
246 ctg ggt gaa cgt gtt acc atc aac tgc aaa gct tcc cag tcc gtt acc 144

```

RAW SEQUENCE LISTING

DATE: 11/30/2004

PATENT APPLICATION: US/10/763,539

TIME: 12:09:55

Input Set : A:\002010-854.ST25.txt

Output Set: N:\CRF4\11302004\J763539.raw

```

247 Leu Gly Glu Arg Val Thr Ile Asn Cys Lys Ala Ser Gln Ser Val Thr
248          35              40              45
250 aac gac gtt gct tgg tac cag cag aaa ccg ggt cag tcc ccg aaa ctg   192
251 Asn Asp Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu
252          50              55              60
254 ctg atc tac tac gct tcc aac cgt tac acc ggt gtt ccg gac cgt ttc   240
255 Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe
256 65          70              75              80
258 tcc ggt tcc ggt tac ggt acc gac ttc acc ttc acc atc tcc tcc gtt   288
259 Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Val
260          85              90              95
262 cag gct gaa gac gtt gct gtt tac tac tgc cag cag gac tac tcc tcc   336
263 Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Asp Tyr Ser Ser
264          100             105             110
266 ccg tac acc ttc ggt ggt ggt acc aaa ctg gag atc taa ggatcctc   383
267 Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile *
268          115             120
271 <210> SEQ ID NO: 8
272 <211> LENGTH: 124
273 <212> TYPE: PRT
274 <213> ORGANISM: Homo sapiens
276 <400> SEQUENCE: 8
277 Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ala Thr Ala Thr Gly
278 1          5              10              15
279 Val His Ser Ile Val Met Thr Gln Ser Pro Asp Ser Leu Ala Val Ser
280          20              25              30
281 Leu Gly Glu Arg Val Thr Ile Asn Cys Lys Ala Ser Gln Ser Val Thr
282          35              40              45
283 Asn Asp Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser Pro Lys Leu
284          50              55              60
285 Leu Ile Tyr Tyr Ala Ser Asn Arg Tyr Thr Gly Val Pro Asp Arg Phe
286 65          70              75              80
287 Ser Gly Ser Gly Tyr Gly Thr Asp Phe Thr Phe Thr Ile Ser Ser Val
288          85              90              95
289 Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln Asp Tyr Ser Ser
290          100             105             110
291 Pro Tyr Thr Phe Gly Gly Gly Thr Lys Leu Glu Ile
292          115             120
295 <210> SEQ ID NO: 9
296 <211> LENGTH: 429
297 <212> TYPE: DNA
298 <213> ORGANISM: Homo sapiens
300 <220> FEATURE:
301 <221> NAME/KEY: CDS
302 <222> LOCATION: (1)...(429)
304 <400> SEQUENCE: 9
305 atg gac tgg acc tgg agg gtc ttc tgc ttg ctg gct gta gca cca ggt   48
306 Met Asp Trp Thr Trp Arg Val Phe Cys Leu Leu Ala Val Ala Pro Gly
307 1          5              10              15

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/763,539

DATE: 11/30/2004
TIME: 12:09:56

Input Set : A:\002010-854.ST25.txt
Output Set: N:\CRF4\11302004\J763539.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:69; Xaa Pos. 32,33
Seq#:70; Xaa Pos. 106,120
Seq#:71; Xaa Pos. 115

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/763,539

DATE: 11/30/2004

TIME: 12:09:56

Input Set : A:\002010-854.ST25.txt

Output Set: N:\CRF4\11302004\J763539.raw

L:1605 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:16
L:1607 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:32
L:1646 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:96
L:1648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70 after pos.:112
L:1677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:112